

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT INCLUDING APS, OPS AND UPGRADING ALL HANDICAP RAMPS TO ADA STANDARDS AT THE INTERSECTION OF MD 414 AND LIVINGSTON ROAD IN PRINCE GEORGE'S COUNTY. MD 414 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR BOTH APPROACHES OF MD 414. MD 414 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH A CONCURRENT PEDESTRIAN PHASE ON THE SOUTH LEG. LIVINGSTON ROAD APPROACHES WILL OPERATE AS A "SIDE STREET SPLIT" WITH AN ALTERNATE PEDESTRIAN PHASE FOR EACH MOVEMENT. THERE IS EMERGENCY VEHICLE PRE-EMPTION FOR THE LIVINGSTON ROAD APPROACHES.

EQUIPMENT LIST FOR CONTRACT NO. XX6555185

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM	QUANTITY	UNIT	DESCRIPTION
9042	1	EA	[UPDATED] CONTROLLER ASC II WITH TELEMETRY
9044	1	EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1	EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	27	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
	2	EA	W1-2 (30" x 30")
	2	EA	W16-7p (24" x 12")
	1	EA	S1-1 (36" x 36")
	1	EA	S4-3 (24" x 8")
	110	SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN
9571	4	EA	D-3 (VAR. x 16") MAST ARM MOUNTED
	2	EA	M1-5 (6).3 (30" x 51") POLE MOUNTED
	2	EA	M1-5 (6).3 (48" x 72") (POLE MOUNTED)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	3	EA	MAINTENANCE OF TRAFFIC
2001	1	CY	CLASS 2 EXCAVATION
2002	1	CY	TEST PIT EXCAVATION
5001	8	EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS SYMBOLS OR LEGENDS
5002	100	LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5003	1050	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	600	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	150	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	240	SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS
6001	385	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1180	SF	5 INCH CONCRETE SIDEWALK
6003	80	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	46	EA	12 INCH LED SIGNAL HEAD SECTION
8002	1	EA	2-WIRE CENTRAL CONTROL UNIT
8004	6	EA	8 INCH LED SIGNAL HEAD SECTION
8008	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	7	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8012	1	EA	EMBEDDED METERED SERVICE PEDESTAL
8015	6	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8017	1	EA	MAST ARM POLE & 38' MAST ARM ANY 'T' DIMENSION
8018	1	EA	MAST ARM POLE & 50' MAST ARM ANY 'T' DIMENSION
8022	3	EA	NON-INVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8023	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8026	1	EA	TWIN MAST ARM POLE & 50'/70' MAST ARMS ANY 'T' DIMENSION
8028	4	EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8030	35	LF	1-CONDUCTOR ELECTRICAL CABLE, NO. 2 AWG/THHN
8032	315	LF	4 CONDUCTOR OPTICOM CABLE
8033	750	LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8037	685	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8039	460	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8040	55	LF	WOOD SIGN SUPPORTS UP TO 4" x 6"
8041	137	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8043	506	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8046	25	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8047	10	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8048	1	EA	DISCRIMINATOR MODEL, 4 CHANNEL, NO. 764
8050	2	EA	OPTICOM NO. 721 DETECTOR EYE
8054	710	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	1665	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	1915	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8063	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG	1	EA	FURNISH AND INSTALL R3-5R (30"x36") FIBER OPTIC TRAFFIC SIGN

CONTACTS

The contact persons for this project are as follows:

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PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	15	16	17	18	19	20
PHASE 1 AND 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																		
PHASE 1 AND 6	←G/G	←G/G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	WK	WK
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	FL/DW	FL/DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R/G→	R	R	R	←G/G	←G/G	G	R	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R/Y→	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	R	R	R/G→	R	R	R	←G/G	←G/G	G	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEARANCE	R	R	R/G→	R	R	R	←G/G	←G/G	G	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
3 ALT CHANGE	R	R	R/Y→	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R/G→	R	R	R	←G/G	←G/G	G	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R/Y→	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R/G→	R	R	R	←G/G	←G/G	G	DW	DW	WK	WK	DW	DW
PED CLEARANCE	R	R	R	R	R	R/G→	R	R	R	←G/G	←G/G	G	DW	DW	FL/DW	FL/DW	DW	DW
4 ALT CHANGE	R	R	R	R	R	R/Y→	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

EMERGENCY VEHICLE PRE-EMPTION

PHASE 3 PRE-EMPTION	R	R	R	R	R	R	G	G	G	R	R	R	DW	DW	DW	DW	DW	DW
3 PRE-EMP. CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 PRE-EMPTION	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW	DW	DW
4 PRE-EMP. CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW

WIRING KEY

- A,B,C,D } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- E,F,G,H } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- J,L,M,N,P } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- Q,R,S,T,U } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- V,W,X,Y } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- Z,A,A } VIDEO CAMERA CABLE
- a,b,c } EXISTING INTERCONNECT CABLE
- d,e,f } EXISTING INTERCONNECT CABLE
- BB } EXISTING INTERCONNECT CABLE
- CC,DD,EE } NON-INVASIVE MICRO LOOP PROBES
- x } NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- y } 3 WIRES, 1 CONDUCTOR ELECTRICAL CABLE (NO. 8 AWG THHN/THWN)
- z } 3 WIRES, 1 CONDUCTOR ELECTRICAL CABLE (NO. 2 AWG THHN)
- +

EXISTING I/C TO ENTRANCE TO RIVERTOWN COMMONS SHOPPING CENTER (WEST)



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

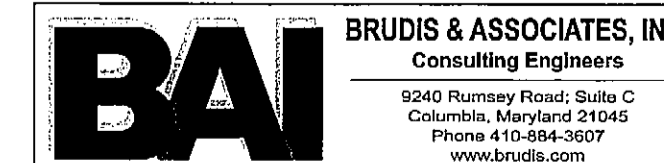
MD 414 (OXON HILL RD) AT LIVINGSTON RD  
OXON HILL, MD

GENERAL INFORMATION PLAN SHEET

SCALE NTS DATE 07/11/2011 CONTRACT NO. XX6555185

DESIGNED BY CW COUNTY PRINCE GEORGE'S  
DRAWN BY CW LOGMILE 16041400.95  
CHECKED BY JB TMS NO. J982  
F.A.P. NO. TOD NO.

TS NO. 993H DRAWING - OF SHEET NO. 3 OF 3



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PLOTTED: Friday, July 15, 2011 AT 02:00 PM  
FILE: P:\05-002 TEDO\Task 38 MD 414 @ Livingston Road\Drawings\CADD\Working\pGG-F000-MD414@LivingstonRd.dgn

BY: chuck